is a certain general conformity to a common type of variation in all the light curves.

This common type is indicated in the plates which accompany this paper.

Lovedale: 1902 *February* 1.

New Variable Stars found during the Measurements for the Astrographic Catalogue at the Royal Observatory, Greenwich.

(*Communicated by the Astronomer Royal.*)

In the course of the measurement of the plates for the photographic map of the heavens, under Mr. Hollis's direction, a careful note is made of large differences of diameter of images of the same star on the overlapping plates which are measured simultaneously in the duplex micrometer.

The following four stars were in this way found to be variable, and their diameter on other plates were measured; the variability of the third one was announced by Dr. Anderson in 1897. The other three appear to be new :—

		Approx. R.A. 1900. h m s	Approx. Dec. 1900. ° ′
A	... ...	18 5 9	65 56·9
B	... ...	18 6 54	66 8·9
C	U Draconis ...	19 9 42	67 7·1
D	... ...	5 49 22	74 30·8

A and B occur on the same plates; the following table gives their measured diameter (the unit being 0″·15) and that of neighbouring comparison stars whose magnitudes are taken from the *Bonn Durchmusterung* :—

No. of Plate.	Date.	Exp. m	A	B	66°·1074 9·0	65°·1238 9·5	66°·1083 9·4	66°·1079 9·5
411	1892 June 6	40	44	42	...	42	47	42
441	1892 „ 23	6	22	16	24	22	22	16
2117	1894 July 3	40	52	10	52	51	44	32
2688	1895 June 16	6	0	3	32	22	24	16
2697	1895 „ 17	6	0	0	...	25	22	13
2724	1895 „ 25	40	0	10	52	40	44	30
5088	1900 Sept. 13	6	16	0	22	22	22	20
5658	1901 June 6	40	21	3	41	33	38	26

A shows on these photographs changes of magnitude from nearly $9^{m}\cdot0$ to below the limit reached by chart plates of 40^{m} exposure or a nominal $14^{m}\cdot0$.

B shows almost as great a range, as it varies from $9^{m}\cdot5$ of the B. D. to nearly the limit of the chart plates.

The following table shows the variation of C (*U Draconis*) as shown by the measures of diameter :—

No of Plate.	Date.	Exp. m	C	67°1118 8·9	67°1120 9·2	67°1113 9·5
483	1892 Aug. 5	40	60	70	58	56
1380	1893 „ 19	6	18	46	38	39
1381	1893 „ 19	40	40	82	68	58
2136	1894 July 11	6	0	44	39	35
2288	1894 Oct. 16	6	4	33	32	19
3200	1896 July 12	40	3	80	64	52
5666	1901 „ 8	6	10	54	44	36

These measures show that C was only a little below $9^{m}\cdot0$ on 1892 August 5, and 1896 July 12 was only just shown on a chart plate of 40^{m} exposure.

The following table shows in a similar manner the variations in magnitude of D :—

No. of Plate.	Date.	Exp. m	D	74°275 8·1	74°267 8·2	74°272 9·3	74°266 9·5
3796	1897 Dec. 24	40	38	123	94	92	58
3869	1898 Feb. 23	40	20	103	84	78	62
3886	1898 Mar. 2	6	0	58	42	42	24
4302	1899 Feb. 25	6	40	54	42	34	22
5410	1901 Feb. 11	40	0	80	66	60	44

The above measures show that this star was between the 8th and 9th magnitudes on 1899 February 25, and on 1901 February 11 was below the limit of the chart plates.

The Magnitude of η Argûs 1900–1902. By R. T. A. Innes.

The two comparison stars used are given in the *Monthly Notices*, vol. lix. p. 570.

	Mag.	Colour.	Means. Date.	Mag.	Colour.
1900 Feb. 26	7·7	6			
Mar. 31	7·65	6	1900·3	7·68	6·3
June 8	7·7	7			